

What is claimed is:

1. A digital camera comprising:

an image pickup element for capturing an image;

5 a correction value memory for storing predetermined light amount correction data each set in advance for each one of predetermined blocks which are obtained by dividing the entire area of the image captured by the image pickup element into at least a central area and a peripheral area;

10 a correction value generator for generating correction values regarding light amounts at the respective target pixels within the blocks based on the plurality pieces of light amount correction data which are held in the correction value memory; and

15 an image field edge brightness reduction corrector for correcting brightness reductions at the respective pixels based on the correction values regarding light amounts generated by the correction value generator.

20 2. A digital camera according to claim 1,

wherein the correction value generator weights, in accordance with the positions of target pixels, the light amount correction data which are associated with blocks containing the target pixels and other neighboring blocks next to the target
25 pixels of the image which is captured by the image pickup element,

to thereby generate the correction values regarding the light amounts at the target pixels.

3. A digital camera according to claim 1,

5 wherein the correction value memory holds predetermined resolution correction data each set in advance for each one of the blocks, and the correction value generator generates correction values regarding resolutions at the respective target pixels within the blocks based on the resolution correction data which are held in the correction value memory, and

10 said digital camera further comprising an edge enhancer which enhances edges of the respective pixels based on the correction values regarding the resolutions generated by the correction value generator to thereby correct image field edge resolution reductions.

15 4. A digital camera according to claim 3,

wherein the correction value generator weights, in accordance with the positions of target pixels, the resolution correction data which are associated with blocks containing the target pixels and other neighboring blocks next to the target pixels of the image which is captured by the image pickup element, to thereby generate the correction values regarding the resolutions at the target pixels.

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5. A digital camera according to claim 1,
wherein the correction value memory holds the light amount
correction data which become different depending on a
predetermined optical condition during imaging.

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6. A digital camera according to claim 1,
wherein the blocks in the peripheral area are set to be
smaller than the blocks in the central area.

10 7. A digital camera comprising:
an image pickup element for capturing an image;
a correction value memory for storing predetermined
resolution correction data each set in advance for each one of
predetermined blocks which are obtained by dividing the entire
15 area of the image captured by the image pickup element into at
least a central area and a peripheral area; and
an edge enhancer for edge-emphasizing the respective
pixels based on the resolution correction data which are held
in the correction value memory to thereby correct image field
20 edge resolution reductions.

8. A digital camera according to claim 7 further comprising:
a correction value generator which generates correction
values regarding resolutions at the respective pixels within
25 the blocks based on the resolution correction data which are

held in the correction value memory,

wherein the edge enhancer edge-enhances the respective pixels based on the correction values regarding resolutions generated by the correction value generator to thereby correct
5 image field edge resolution reductions.

9. A digital camera according to claim 8,

wherein the correction value generator weights, in accordance with the positions of target pixels, the resolution
10 correction data which are associated with blocks containing the target pixels and other neighboring blocks next to the target pixels of the image which is captured by the image pickup element, to thereby generate the correction values regarding the resolutions at the target pixels.

15 10. A digital camera according to claim 7,

wherein the correction value memory holds the resolution correction data which become different depending on a predetermined optical condition during imaging.

20 11. A digital camera according to claim 7,

wherein the blocks in the peripheral area are set to be smaller than the blocks in the central area.

25 12. An image signal processing method for a digital camera,

comprising:

generating correction values, in a condition that
predetermined light amount correction data each set in advance
for each one of predetermined blocks which are obtained by
5 dividing the entire area of the image captured by an image pickup
element into at least a central area and a peripheral area are
held, regarding light amounts at the respective target pixels
within the blocks based on the light amount correction data;
and

10 correcting image field edge resolution reductions at the
respective pixels based on the generated correction values
regarding the light amounts.

13. An image signal processing method for a digital camera,
15 comprising:

memorizing in advance predetermined resolution
correction data each set for each one of predetermined blocks
which are obtained by dividing the entire area of the image
captured by the image pickup element into at least a central
20 area and a peripheral area; and

executing edge-enhancement for respective pixels based
on the resolution correction data, to thereby correct image field
edge resolution reductions.

25 14. A recording medium which stores a program for correcting

light amount drops at the edge of an image field which is captured using a predetermined image pickup element of a digital camera, wherein the program is for executing a sequence in which,

generating correction values, in a condition that

5 predetermined light amount correction data each set in advance for each one of predetermined blocks which are obtained by dividing the entire area of the image captured by the image pickup element into at least a central area and a peripheral area are held in the digital camera, regarding light amounts at the
10 respective target pixels within the blocks based on the light amount correction data; and

correcting image field edge brightness reductions at the respective pixels based on the generated correction values regarding the light amounts.

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15. A recording medium which stores a program for correcting resolutions at the edge of an image field which is captured using a predetermined image pickup element of a digital camera, wherein the program is for executing a sequence in which,

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executing edge enhancement, in a condition that

predetermined resolution correction data each set in advance for each one of predetermined blocks which are obtained by dividing the entire area of the image captured by the image pickup element into at least a central area and a peripheral area are

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held in the digital camera, for the respective pixels based on

the held resolution correction data, to thereby correct image field edge resolution reductions.